Date: Tue, 7 Sep 93 10:42:13 PDT

From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>

Errors-To: Info-Hams-Errors@UCSD.Edu

Reply-To: Info-Hams@UCSD.Edu

Precedence: Bulk

Subject: Info-Hams Digest V93 #1055

To: Info-Hams

Info-Hams Digest Tue, 7 Sep 93 Volume 93 : Issue 1055

Today's Topics:

\* SpaceNews 06-Sep-93 \*

coax relay inquiry: Transco Products Inc. Los Ang. Calif????

I can't find my original license

Looking to join ham club

Minimum volume power supply

Radio Shack attitudes

W9GR DSP KIT ??

Wanted: Yaesu YS-60 manual

Yagi for Cellular Phone? (2 msgs)

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu> Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu> Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available (by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text herein consists of personal comments and does not represent the official policies or positions of any party. Your mileage may vary. So there.

\_\_\_\_\_\_

Date: 7 Sep 93 15:24:44 GMT From: news-mail-gateway@ucsd.edu Subject: \* SpaceNews 06-Sep-93 \*

To: info-hams@ucsd.edu

SB NEWS @ AMSAT \$SPC0906 \* SpaceNews 06-Sep-93 \*

BID: \$SPC0906

======= SpaceNews ======

# MONDAY SEPTEMBER 6, 1993

SpaceNews originates at KD2BD in Wall Township, New Jersey, USA. It is published every week and is made available for unlimited distribution.

# \* NOAA-13 NEWS \*

==========

Satellite controllers lost contact with the NOAA-13 satellite on Saturday 21-Aug-93, and preliminary indications are that the spacecraft's power system is not working, according to officials at NASA and the National Oceanic and Atmospheric Administration.

All battery charging aboard the satellite ceased at approximately 3:45 PM EDT 21-Aug-93, according to Charles E. Thienel, Meteorological Satellites Project Manager at NASA's Goddard Space Flight Center, Greenbelt, Maryland. Contact with the spacecraft during subsequent ground passes showed steadily decreasing battery voltages and currents, he said.

Output from the solar arrays continued to be normal, Thienel said, indicating a failure in the circuitry between the solar arrays and the batteries. There has been no contact with the spacecraft since approximately 7:15 PM EDT 21-Aug-93.

The spacecraft was launched by the U.S. Air Force from Vandenberg Air Force Base, California on 09-Aug-93. Spacecraft operations were turned over to NOAA on 12-Aug-93 as a part of planned checkout procedures. Instrument checkouts were continuing at the time of the failure.

NOAA-13 is the newest in a series of polar-orbiting weather satellites. It is designed to monitor the Earth's ocean and atmosphere. It collects meteorological and ocean data for direct transmission to users around the world and to central data processing centers.

NOAA-11, which NOAA-13 was planned to replace, was launched in September 1988 and NOAA-12 in May 1991. Both are providing environmental data to users around the world. NOAA officials said the problem with NOAA-13 would not affect weather coverage. Instruments on NOAA-11 and NOAA-12 are providing full coverage. NOAA-13 was called up to ensure continuity of data because of degradation in NOAA-11's instruments and spacecraft subsystems.

The spacecraft was built by Martin Marietta Astro Space in East Windsor, NJ. The spacecraft completed its initial functional and environmental testing in early 1990. The spacecraft then was held in standby with routinely scheduled aliveness testing until March 1993, when it went through complete functional

checkout in preparation for launch.

[Info via NASA]

## \* F0-20 SCHEDULE \*

The following is the latest FO-20 mode JA transponder schedule from the JARL:

01-Sep-93 09:05 through 02-Sep-93 09:25 UTC 08-Sep-93 09:30 through 09-Sep-93 07:58 UTC 22-Sep-93 08:30 through 24-Sep-93 09:05 UTC 29-Sep-93 08:50 through 30-Sep-93 09:11 UTC

There will be no planned Mode JA operations on 15-Sep-93 so there are two Mode JA days the following week starting the 22nd.

[Info via 73 Richard, G3RWL]

### \* OPERATION ASSIST \*

Helmut, DG5MFX, would like some information on how he might receive CCD images from amateur satellites UO-22 and KO-23. Helmut can be reached on packet at: DG5MFX @ DB0MWE.BAV.GER.EU.

Dean, ZP6XD, is having difficulty accessing the UO-22 and KO-23 satellites using an AEA DSP-2232 packet radio TNC. He believes his problem may lie in the interconnection between his TNC and his ground station radio equipment. Dean may be reached at:

J. Dean Moore, ZP6XD P.O. Box 2320 Asuncion, Paraguay

Jim, N7IJS, would like some information on synthetic aperture radar, and in particular, SAR images of forests and other types of lands. He would also like to know what radio frequencies are involved in SAR, the orbital characteristics of SAR satellites, the sensitivity with various materials, the performance through tree cover, the ground-penetrating characteristics, etc. Jim may be reached at:

Jim Bell, N7IJS 7214 Corregidor Vancouver, Washington 98664 U.S.A. \* SCHOOL DAYS \*

//// (o o) \*------

We hope that you had a great summer. The school year ahead is ripe with opportunities for personal and academic growth. The BEARS wish you a fantastic

school year filled with ham radio fun.

73 Pete, KZ1Z and The BEARS

Bethel Educational Amateur Radio Society Bethel Middle School

-----\*

Bethel, Connecticut

\* THANKS! \*

Thanks to all those who sent messages of appreciation regarding SpaceNews, especially:

KZ1Z DG5MFX N7IJS ZP6XD

# \* FEEDBACK/INPUT WELCOMED \*

Mail to SpaceNews should be directed to the editor (John, KD2BD) via any of the following paths:

FAX : 1-908-747-7107

UUCP : ...catfish.ocpt.ccur.com!ka2qhd!kd2bd

PACKET : KD2BD @ NN2Z.NJ.USA.NA

INTERNET : kd2bd@ka2qhd.ocpt.ccur.com -or- kd2bd@amsat.org

MAIL : John A. Magliacane, KD2BD

Department of Engineering and Technology

Advanced Technology Center Brookdale Community College Lincroft, New Jersey 07738

U.S.A.

<=- SpaceNews: The first amateur newsletter read in space! -=>>

- -

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Date: 7 Sep 93 01:50:01 GMT

From: agate!spool.mu.edu!uwm.edu!cs.utexas.edu!utnut!utgpu!attcan!ncrcan!coutts!

fawlty!wwg@ames.arpa

Subject: coax relay inquiry: Transco Products Inc. Los Ang. Calif????

To: info-hams@ucsd.edu

A couple of local hams are looking for mailing addresses for

Transco Products Inc., of Los Angeles, Calif.

They want to inquire regarding some military spec coax switches that were manufactured by this company. They don't seem to be "listed" in the telephone book anymore.

Anyone out there knows if they moved on, expired or what?

Thanks in advance,

Warren VE3WWG.

(ncrcan.canada.ncr.ca!coutts!wwg@uunet.ca)

-----

Date: Tue, 7 Sep 1993 14:36:45 GMT

From: swrinde!elroy.jpl.nasa.gov!usc!howland.reston.ans.net!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!IASTATE.EDU!wjturner@network.ucsd.edu

Subject: I can't find my original license

To: info-hams@ucsd.edu

In article <CCqErJ.AGr@feenix.metronet.com>, marcbg@feenix.metronet.com (Marc
Grant) writes:

>

> If you are a Tech+ and have credit for the 5 WPM, then you will definitly

- > need your CSCE to prove 5WPM credit since your license will have a new
- > date on it. If you can't find a CSCE, and you've been licensed a while,
- > perhaps carrying in a callbook might help with your original license.

>

I don't see how this is ever going to be a problem. If you are a Tech+, then you have passed elements 1a,2,3a. To upgrade to \*anything\* you must pass at least element 3b for General, and thus also element 1b. So, you must be able to do 13wpm, and element 1a is not required for element 1b. (If you can do 13wpm, you can definitely do 5wpm--if you don't fall asleep during the test. :-) Therefore, if you are a Tech+, there is still no reason to take the CSCE to the testing session, unless you plan to operate some HF before passing (hopefully!) elements 1b and 3b. You just need to bring the original and a copy of your Tech license.

> Or, since you'll be taking the 13 WPM before the 5 WPM, you really don't > have to prove you passed the 5WPM.

As stated above, you will never have to prove it at a testing session (if you are a Tech+ or above).

Will Turner, NORDV TURNERW@vaxld.ameslab.gov

wjturner@iastate.edu | "Are you going to have any professionalism, | \_\_\_\_\_

Date: 7 Sep 93 12:36:10 GMT

From: psinntp!arrl.org@uunet.uu.net Subject: Looking to join ham club

To: info-hams@ucsd.edu

In rec.radio.amateur.misc, lesatz@aludra.usc.edu (Eric LeSatz) writes:

>I am new to the Los Angeles ham community and would like to join a ham >club.

The ARRL Automated Electronic Mail Server has a series of files listing ARRL affiliated clubs by state. Send the following as the text of a message to info@arrl.org (the Subject: line is ignored by our server software).

send clubs-xx help index quit

SUBSTITUTE YOUR STATE'S POSTAL ABBREVIATION FOR XX! (Anyone wanna' take bets on how many requests we get for the "club-xx" file?

73 from ARRL HQ, Ed.

----

Ed Hare, KA1CV American Radio Relay League 225 Main St. Newington, CT 06111 (203) 666-1541 - voice ARRL Laboratory Supervisor

RFI, xmtr and rcvr testing

ehare@arrl.org

"You will never put the puzzle together if you keep putting all of the pieces back in the box." Colleen

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Date: 7 Sep 1993 09:34:00 -0400

From: dog.ee.lbl.gov!agate!spool.mu.edu!nigel.msen.com!ilium!gdls.com!gdls.com!

not-for-mail@network.ucsd.edu

Subject: Minimum volume power supply

To: info-hams@ucsd.edu

I recently purchased a Kenwood TS-50s to use as a portable rig when I travel. Unfortunately, the power supplies currently available are several times the size of the radio.

Does anyone have any information on compact, high current power supplies that might be used in this application? I guess that I'm looking for a power supply about the size of the radio that puts out 20 amps. Is this technically possible? Does anyone make one?

Thanks

Bill

- -

Bill Turini, KA4GAV Computer Sciences Corporation 6000 E. 17 Mile Road Sterling Heights, MI 48313 Chief, Technical Systems turini@gdls.com (313) 825-8810

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Date: 7 Sep 93 13:40:43 GMT

From: ogicse!emory!wupost!howland.reston.ans.net!usenet.ins.cwru.edu!

magnus.acs.ohio-state.edu!ksampath@network.ucsd.edu

Subject: Radio Shack attitudes

To: info-hams@ucsd.edu

bad attitude or not, what really irks me is their insistence of having "the last four digits of my phone number," every time i am there. i have refused to give it in the past, and occasionally still do so, but my resolve is weakening..... afterall, the salesdroid is doing what he is \_instructed\_ to.

further, here in columbus ohio, i am yet to find a suitable retail place where i can just walk in and buy say, a phono jack. since i do not want to wait 4-7 days to get a single diode or an audio transformer, whether i like it or not, i have to shop at radioshack.

73 krishna kb8fav

krishna s. sampath, phd....sr. research associate...kss@lenz.eng.ohio-state.edu ohio state u, electroscience lab.....(614) 292-7981 (w)....(614) 292-7297 (f) 1320 kinnear rd, columbus, oh 43212....06/93 EE PHD NEEDS EMI/EMC/COMPUTING JOB

Date: 7 Sep 93 16:37:18 GMT

From: idacrd.ccr-p.ida.org!idacrd!n4hy@uunet.uu.net

Subject: W9GR DSP KIT ?? To: info-hams@ucsd.edu

>Marc, DSP theory suggests that a serious CW operator will not be satisfied >with the available 50 db dynamic range from an 8-bit A/D. Timewave has >vastly superior hardware with a 16-bit sigma-delat A/D...KG7BK

Please describe what you mean.

Bob

Robert W. McGwier Center for Communications Research | Interests: amateur radio, astronomy, golf

| n4hy@ccr-p.ida.org

Princeton, N.J. 08520 | Asst Scoutmaster Troop 5700, Hightstown

Date: 7 Sep 93 15:13:14 GMT

From: ogicse!uwm.edu!vixen.cso.uiuc.edu!newsrelay.iastate.edu!news.iastate.edu!

kenman@network.ucsd.edu

Subject: Wanted: Yaesu YS-60 manual

### To: info-hams@ucsd.edu

I bought a used Yaesu YS-60 power/SWR meter. No manual/instructions included. Is someone willing to photocopy and send me one? I'll reimburse expenses.

- -

Ken Anderson (Kenman@iastate.edu) 126 Soil Tilth Bldg. (515)294-8996 Iowa State University Ames, Iowa 50011

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Date: 7 Sep 93 14:53:41 GMT

From: ogicse!uwm.edu!wupost!sdd.hp.com!hpscit.sc.hp.com!cupnews0.cup.hp.com!

jholly@network.ucsd.edu

Subject: Yagi for Cellular Phone?

To: info-hams@ucsd.edu

Gary McDuffie Sr (mcduffie@unlinfo.unl.edu) wrote:

: wier@merlin.etsu.edu (Bob Wier) writes:

: >I've just joined the cellular phone ranks ... Dallas

: >is a very hot cellular market and there are pretty attractive

: >deals (not that I'm dissatisified with 2 meters :-).

: >One thing I'd like to be able to do is to take it to

: >a place I own in S.W. Colorado way back in the mountains.

: >It would be nice to be able to use the phone up at our cabin,

: >especially when non - hams visit and I'm not around.

: >I did some checking and found that the company which owns

: >the cellular license there has no intention of building a

: >cell in the forseeable future (that p\*sses me off! Sounds

: >like something that should be challenged legally - use it or

: >lose it). The nearest operating cell is currently 80 miles

: >away which will \*occasionally\* produce a "lock" on a phone my

: >partner brought up this last summer. But since his was a .6

: >watt hand held, it couldn't "break" the cell. I have a 3 watt

: >unit, so am wondering if anyone knows of/has tried using a yagi

: >for cellular coverage. Of course you wouldn't want to do

: >this in a metro area - it might well goof up hand offs between

: >adjacent cells. However, \*apparently\* there isn't any law against

: >it, since I see Radio Shack advertising antennas which have "5 db gain".

: >I wonder if you might be able to get Down East Microwave to custom

: >cut you a yagi for 850 Mhz?

: >Any suggestions appreciated!

: >73's de WB5KXH

: >====== insert usual disclaimers here ========

: > Bob Wier, East Texas State U., Commerce, Texas

: > wier@merlin.etsu.edu (watch for address change)

: My understanding is that not only the power is controlled by law, but

: so is the antenna. Antennas are to have no more than 3db gain (I was

: told) and the 5db antennas are the same old "db over what?" tricks we

: have all seen for years. I'm sure you will get better answers than

: this but thought I would pass this much along. Again, the above info

: is just something I was told (by a cell designer and engineer). I have

: no formal backup for it.

### : 73, Gary - AGONa

Out here in the land of gold we have road side cell phones for road side emergency help. Most have the normal center loaded whip on top, but a I have seen a couple with real nice 4 element beams on top. Dear me, they must be breaking the law :-). I think the short answer is, don't use a gain antenna in the metro area, but if you need the gain, use it. I am sure the Colorado cell company will be more than happy to provide you service and take your money. Since you will not be hopping cells in this situation, I see no reason why you should not use some gain to access the cell.

Jim Hollenback, WA6SDM
jholly@cup.hp.com

-----

Date: 7 Sep 93 14:57:06 GMT

From: ogicse!uwm.edu!vixen.cso.uiuc.edu!sdd.hp.com!col.hp.com!fc.hp.com!

goris@network.ucsd.edu

Subject: Yagi for Cellular Phone?

To: info-hams@ucsd.edu

Bob Wier (wier@merlin.etsu.edu) wrote:

: I've just joined the cellular phone ranks ... Dallas

: is a very hot cellular market and there are pretty attractive

: deals (not that I'm dissatisified with 2 meters :-).

: One thing I'd like to be able to do is to take it to

: a place I own in S.W. Colorado way back in the mountains.

: It would be nice to be able to use the phone up at our cabin,

: especially when non - hams visit and I'm not around.

: I did some checking and found that the company which owns

- : the cellular license there has no intention of building a
- : cell in the forseeable future (that p\*sses me off! Sounds
- : like something that should be challenged legally use it or
- : lose it). The nearest operating cell is currently 80 miles
- : away which will \*occasionally\* produce a "lock" on a phone my
- : partner brought up this last summer. But since his was a .6
- : watt hand held, it couldn't "break" the cell. I have a 3 watt
- : unit, so am wondering if anyone knows of/has tried using a yagi
- : for cellular coverage. Of course you wouldn't want to do
- : this in a metro area it might well goof up hand offs between
- : adjacent cells. However, \*apparently\* there isn't any law against
- : it, since I see Radio Shack advertising antennas which have "5 db gain".
- : I wonder if you might be able to get Down East Microwave to custom
- : cut you a yagi for 850 Mhz?

#### Hi Bob!

I'd thought about building something like this as a product - you could stick it in your trunk, and if you were ever in a fringe area and had an emergency, just pull out the yagi. The Yagi only needs to be about 7 inches wide, and you should be able to get 10-12 dB with less than a 2-ft. Boom. You might want the boom to disassemble into 2 sections. This brings up some questions I've always had:

- 1. When your cellphone is on receive, does it only listen to one frequency, or does it scan a series of frequencies?
- 2. What is the absolute lowest and highest frequencies used by cellular telephone ?
- 3. What is the characteristic impedance that the phone wants to drive... 50 or 75 ohms? What is the typical cable used RG-8X, RG-6?
- 4. What kind of connector does your cell phone have? BNC? N?
- 5. Is there really no law regarding antenna size and cellular phone? If there is a maximum radiated power restriction, you could always advertise the antenna as intended for .6W units, with the wink-wink-wink that people will really stick this on 3W units :-).
- 6. What does the Radio-Shack 5dB gain antenna look like? Is it a vertical, or a yagi? And, as with all antennas, what is the 5dB relative to? An isotropic radiator, a dipole, a 'typical car-mount antenna', or a typical whip on the cell-phone?

I'd be interested in working with you on this problem - run some designs through YAGIMAX, etc. If you can get me the answers to the above questions.

```
Andy Goris
AA0CM
goris@fc.hp.com
                                    303-229-2402 (work)
Date: Tue, 7 Sep 1993 13:40:45 GMT
From: pipex!sunic!ericom!xio.ericsson.se!ted@uunet.uu.net
To: info-hams@ucsd.edu
References <1993Sep6.185728.13433@ericsson.se>,
<26g6cm$53o@newsserv.cs.sunysb.edu>, <1993Sep7.124509.23372@ericsson.se>son
Subject : Re: Program, convert from S params -> Spice model
>>: In article <26fg95$1tk@newsserv.cs.sunysb.edu> rick@cs.sunysb.edu (Rick
Spanbauer) writes:
>>
>>: The other way is OK and actually no special programs are needed for this. The
>>: methods are described in books.
>>
>>
    Reference, please?
I have lost my photocopies from som PESPICE book. Please, someone else help us!
///
      Ted Johansson, Dr.Tech. | eka.ekated@memo.ericsson.se
                                                                        ///
      ERICSSON COMPONENTS AB | S-164 81 KISTA, SWEDEN
///
                                                                        ///
_____
Date: Tue, 7 Sep 1993 12:45:09 GMT
From: dog.ee.lbl.gov!agate!doc.ic.ac.uk!pipex!sunic!ericom!xio.ericsson.se!
ted@network.ucsd.edu
To: info-hams@ucsd.edu
References <26fg95$1tk@newsserv.cs.sunysb.edu>,
<1993Sep6.185728.13433@ericsson.se>, <26g6cm$53o@newsserv.cs.sunysb.edu>
Subject : Re: Program, convert from S params -> Spice model
In article <26g6cm$530@newsserv.cs.sunysb.edu> rick@cs.sunysb.edu (Rick Spanbauer)
writes:
>T/TT Ted Johansson (ted@xio.ericsson.se) wrote:
>: In article <26fg95$1tk@newsserv.cs.sunysb.edu> rick@cs.sunysb.edu (Rick
Spanbauer) writes:
>: >Does anyone happen to have a pointer to a PD program that will take
>: >a set of S parameters and crunch them backwards into a Spice
>: >compatible model?
```

```
>: Principally, this is not possible, since SPICE-models for MOS och BJT
>: are large-signal models and the s-parameters describe the small-signal
>: behaviour in a working point. Of course, it is possible to extract a
>: small-signal only model for SPICE, but what's the point?
>
>
    Yes, I meant the small signal, linear model. It is useful to have
    such a model to use in conjunction with SPICE, as one can build
>
>
    and model eg amplifiers before building a prototype.
>: The other way is OK and actually no special programs are needed for this. The
>: methods are described in books.
    Reference, please?
>
                                                                          ///
>: /// Ted Johansson, Dr.Tech. | eka.ekated@memo.ericsson.se
>
                  Rick Spanbauer
>
                  SUNY/Stony Brook
>
///
      Ted Johansson, Dr.Tech. | eka.ekated@memo.ericsson.se
                                                                     ///
      ERICSSON COMPONENTS AB | S-164 81 KISTA, SWEDEN
///
                                                                       ///
Date: Tue, 7 Sep 1993 13:46:41 GMT
From: dog.ee.lbl.gov!agate!doc.ic.ac.uk!uknet!pipex!sunic!ericom!xio.ericsson.se!
ted@network.ucsd.edu
To: info-hams@ucsd.edu
References <26g6cm$53o@newsserv.cs.sunysb.edu>,
<1993Sep7.124509.23372@ericsson.se>, <1993Sep7.134045.25123@ericsson.se>
Subject : Re: Program, convert from S params -> Spice model
>>>: The other way is OK and actually no special programs are needed for this. The
>>>: methods are described in books.
>>>
>>> Reference, please?
I forgot, check Microwaves & RF, May 1993, p. 210. There is an article on the
subject.
///
      Ted Johansson, Dr.Tech. | eka.ekated@memo.ericsson.se
                                                                     ///
      ERICSSON COMPONENTS AB | S-164 81 KISTA, SWEDEN
///
                                                                       ///
_____
```

Date: 7 Sep 1993 14:25:23 GMT

From: swrinde!gatech!howland.reston.ans.net!darwin.sura.net!udel! newsserv.cs.sunysb.edu!rick@network.ucsd.edu To: info-hams@ucsd.edu References <1993Sep7.124509.23372@ericsson.se>, <1993Sep7.134045.25123@ericsson.se>, <1993Sep7.134641.25404@ericsson.se> Subject : Re: Program, convert from S params -> Spice model T/TT Ted Johansson (ted@xio.ericsson.se) wrote: : >>>: The other way is OK and actually no special programs are needed for this. : >>>: methods are described in books. : >>> : >>> Reference, please? : I forgot, check Microwaves & RF, May 1993, p. 210. There is an article on the : subject. No, what my original posting sought was a program to take a set of S parameters and crunch them into a linear, small signal fet/bjt model - ie given the S params, gm, etc, produce a set of component values that closely fit the measured parameters of the transistor. SuperCompact can do this; I am looking for a lower (ie freeware) alternative to SuperCompact. Getting spice to print the h/s/z/y params for a specified circuit is something I already know how to do ;-) : /// Ted Johansson, Dr.Tech. | eka.ekated@memo.ericsson.se ///

Rick Spanbauer, SUNY/Stony Brook

///

ERICSSON COMPONENTS AB | S-164 81 KISTA, SWEDEN

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: ///

End of Info-Hams Digest V93 #1055